## Remarks

As a preliminary matter, Applicant thanks the Examiner for the courtesy shown to Applicant's representative to discuss the status of the present claims, a newly discovered reference (U.S. Patent No. 4,121,975, Ullman), and potential claim amendments. Applicant is submitting this Supplemental Amendment based on those discussions, including the discussion on June 24, 2004, between the Examiner and Applicant's undersigned representative.

Claims 1-12, 15-20, 22-41, and 85 were pending. By way of this response, claims 1, 19, and 85 have been amended, claims 8-10, 16, 23, and 24 have been cancelled, and claims 86-93 have been added. Support for the amendments to the claims may be found in the specification as originally filed, and care has been taken to avoid adding new matter. Accordingly, claims 1-7, 11, 12, 15, 17-20, 22, 25-41, and 85-93 are currently pending.

The claims have been amended in view of the Examiner's comments and U.S. Patent No. 4,121,975 (Ullman), which the Examiner believed was relevant to the previously amended claims.

Based on the June 24, 2004 discussion, Applicant understands that the amendments to claim 1 should be sufficient to put claim 1 and the claims dependent therefrom, that is claims 2-7, 11, 12, 15, 17-20, 22, 25-41, and 85, in condition for allowance.

In addition, Applicant submits that the new claims 86-93 are similarly allowable as discussed below.

Support for claims 86-93 may be found in the specification as originally filed. For example, Example 1 describes a detecting composition of a kit that includes a plurality of reagents. One of the reagents is 25-OH-D coupled to a solid phase, such as magnetic particles. The 25-OH-D that is coupled to a solid phase interacts competitively with 25-OH-D that may be present in the

sample as is understood by persons of ordinary skill in the art regarding competitive binding assays.

The Office Action indicates that a kit comprising at least NaOH, cyclodextrin, and sodium salicylate appear to be allowable over the prior art. Claim 86 is directed to a kit that comprises a releasing composition including NaOH or KOH, cyclodextrin, and a salicylate. The kit also comprises a plurality of reagents including 25-OH-D coupled to a solid phase. Applicant submits that the references taken alone or in any combination to do not disclose, teach, or even suggest the combination of elements provided in the kit recited in claim 86, or the claims dependent therefrom.

Kobayashi discloses the use of bovine serum albumin (BSA), ovalbumin (OVA), and gelatin (GEL) each provided separately to determine the solubility of 25-OH-$D_3$. Kobayashi also discloses the use of gelatin in combination with cyclodextrins and the effect of that combination on the solubility of 25-OH-$D_3$. Kobayashi does not disclose, teach, or even suggest a kit which comprises a cyclodextrin in combination with NaOH or KOH and a salicylate, as recited in claim 86.

The Examiner uses Atkinson as a teaching of a sodium salicylate. However, as indicated in Applicant's previous response, Applicant submits that one of ordinary skill in the art would not be motivated to combine the teachings of Atkinson et al. with Kobayashi et al. in view of the Instruction Manual of Incstar Corporation at least because the teachings of the references are from nonanalagous arts. While Kobayashi et al. is researching the detection of a vitamin D metabolite from samples, Atkinson et al. discloses the detection of a salicylate, such as aspirin, from a sample. The subject matter of these two references are not even related.

Applicant also disagrees that Atkinson et al. teaches that salicylate compositions are important in drug evaluation of biological fluids. The passage identified by the Examiner states that the level of salicylate compounds in biological fluids is required to be estimated when a patient is suffering from a drug overdoes, for example. In other words, the salicylate is being measured,

and is not being used in an assay for some other component present in a biological sample. In short, Atkinson discloses detecting a salicylate, not using a salicylate in a kit to detect 25-OH-D.

Applicant also submits that the Examiner has not met the burden of proof to establish that one of ordinary skill in the art would modify the teachings of the art by using NaOH and KOH in a releasing composition, as recited in the present claims. The Office Action states that NaOH and KOH are equivalents for an aqueous base solutions, but the Office Action fails to indicate what aqueous base solutions are equivalents. The Office Action states that Kobayashi discloses aqueous bases, such as bovine serum albumin (BSA) and ovalbumin (OVA). While not conceding to the Examiner's characterization of BSA and OVA as aqueous bases, Applicant submits that NaOH and KOH are not equivalents of either BSA or OVA. To support this, Applicant notes that the Aldrich list of Volumetric Solutions, which the Examiner has identified, does not indicate that NaOH and/or KOH is an equivalent of BSA or OVA, let alone that BSA or OVA is an aqueous base. Accordingly, Applicant submits that the rejections of the present claims under 35 U.S.C. § 103 cannot be properly maintained in view of the remarks made in the Office Action.

Regarding the identification of Ullman, Applicant submits that a person of ordinary skill in the art would not be motivated to combine Ullman with any of the other cited references. Ullman discloses a composition in an assay for thyroxine. As understood by persons of ordinary skill in the art, thyroxine and 25-OH-D are structurally and functionally different and distinct, one from the other. Thus, Applicant submits that a person of ordinary skill in the art studying kits and methods of detecting 25-OH-D in a sample would not look at a disclosure related to assays for thyroxine.

In addition, Applicant submits that the kit of claim 86 includes a plurality of reagents, including 25-OH-D coupled to a solid phase. As discussed above, this 25-OH-D is used in a competitive manner to compete with 25-OH-D present in a sample. Ullman does not disclose, teach, or even suggest including 25-OH-D in the composition used in the thyroxine assay. Applicant submits that Ullman actually **teaches away** from including 25-OH-D, let alone 25-OH-D coupled to a

solid phase, in the thyroxine assay composition since 25-OH-D would not competitively interact with thyroxine. "As a general rule, references that teach away cannot serve to create a prima facie case of obviousness." (*McGinley v. Franklin Sports, Inc.* CAFC 8/21/01 citing *In re Gurley*, 31 USPQ2d 1131, (Fed. Cir. 1994)).

In view of the above, Applicant has shown that the present claims satisfy the requirements of 35 U.S.C. § 112, and are not anticipated by and are unobvious from and patentable over the prior art under 35 U.S.C. §§ 102 and 103. Therefore, applicant submits that the present claims, that is claims 1-7, 11, 12, 15, 17-20, 22, 25-41, 85-93 are allowable. Applicant requests the Examiner to pass the above-identified application to issuance at an early date.

If a telephone interview would be of assistance in advancing prosecution of the subject application, Applicant's undersigned representative invites the Examiner to telephone him at the number provided below.

Respectfully submitted,

Date: 6/28/04

Greg S. Hollrigel
Registration No. 45,374
Stout, Uxa, Buyan & Mullins, LLP
4 Venture, Suite 300
Irvine, California 92618
Telephone: 949-450-1750
Facsimile: 949-450-1764